Work Order ID 97529 February-21-13 3:06:17 PM				*97!	Page 1							
Item ID: Revision ID:	D3929-042	**************************************		Accept	*N900	040	100)* s	etup Sta	rt *N	S1*	
	Gusset Assem	bly							Sto	p *N	S2*	
Start Date: Required Date:	2/15/13 3/01/13	Start Qty: 2.00 Req'd Qty: 2.00	*9* *9*	*8*	Cust Item I	D:				14	()/	
Reference:			•									
Approvals:	Process Pla	an: MC5	Date: 13-02-	ZJ Tooling:	D	ate:	·	R	tun Sta	1/1	R1*	
1) 6)	QC:		Date:	SPC (Y/N):	D	ate:			Sto	*N	R2*	
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	
Draw Nbr	Rev	vision Nbr										
→D3929	Α	,		•								
100				0.00				_				:,
100 Waterjet		Memo		0.00				8	Ô		Ae 13:11.	
FLOW CNC Waterj	et	I-Cut as per Dwg Rev: Prog Rev:	Dwg D3929						,		10/11	. 04
t C Fet		2-Deburr if	necessary									
110		QC2- Inspect parts off m	nachine FAI/FAIB	0.00								
110								8	O		Ac.	
QC Quality Control		Memo		0.00							13:11.	04

Quality Control

												DQA:	Da	te:	
NCR:	Yes	/ No				WORK ORDER NON-	COI	NFORN	/IANCE / UP	DATE					
						- · · · · · · · · · · · · · · · · · · ·						QA Closed:	Da	te:	
Work Ord	or.					DISPOSITION				AGAINST D	E	PARTMENT	/PROCESS		
WOIK OIG	CI.					Rework	7		Skid-tube	Crosstube			Water Jet		Engineering
Part I	Part No.					Scrap	1	Machining	Small Fab	┪	Pro	d. Eng. Coor.	H	Quality	
				Use-as-is	1	Thermoforming Finishing			<u> </u>				Other		
NCR No.				Work Order Update	1		Large Fab Composite		Supplier		-				
Root				Description of work order update Initial Action					Sign &						
Cause		Date	Step	Qty	(r Non-conformance Chief Eng			Desc	ription		Date	Verificatio	n	QC Inspector
Doc/Data															
Equip/Tooling															
Operator							1								
Material															
Setup															
Other									:						
Process															
Supplier															
Training															
Unapproved				<u> </u>											
				-		F	AUI	LT CATE	GORY						
Landi	ng (Gear				General		_		-		1		_	-
		Bending				Bend		Grain				Ovalized		L	Pressure/Forced
		Centre N	ot Concer	ntric to	o/s	BOM/Route	L	Hardwa	re			Over/Under	tolerance	\perp	Temperature/Cure
		Cracks				Broken/Damaged		Inspecti	on Incomplete			Part Incorre	ct	\perp	Weld
	L	Crushed/	Crimped.			Burrs		Instruct	ions Incomplete/	Unclear		Part Lost/M	issing		Wrong Stock Pulled
		Cuffs				Contamination	Maintenance				Part Moved				
	Heat Treat Countersink				Mislabeled			Positioned Wrong		-					
		Inspection Strip in Tube Cut Too Short			Cut Too Short		Misread	i			Power Loss/	'Surge		Other	

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

Work Order ID 97529 Feb _r ruary-21-13 3:06:17 PM				*97	529*		Page 2				
Item ID: Revision ID:	D3929-042 Gusset Assem	.b.l		Accept	*N900	04010	N *	Setup St	art *N	S1*	
Item Name: Start Date: Required Date: Reference:	2/15/13	Start Qty: 2.00 Req'd Qty: 2.00	*2* *2*		Cust Item l Customer:	D:			· "N	57"	
Approvals:		an:				ate:	 -		art *N	R1* R2*	
Sequence ID/ Work Center I 120 *120* QC Quality Control	D	Operation Description QC8- Inspect parts - sec	ond check	Set Up/ Run Hours 0.00 S		Tool # Plan Code		ept Reject Qty	Reject Number	Insp. Stamp	
*1.40 *1.40* Large Fab Large Fab			ngs D3907-1 as per dwg batch: <u></u>				8		me	/3.11.2 ⁼	
150 *150* QC Quality Control		QC9- Inspect visual per Memo	QSI004- Fusion Welds	0.00			(B_\	5-11-2 <u>9</u>	DAS 9 9-89	

NCR: Yes / No WORK ORDER NON-CONFORMANCE / UPDATE													
							_				QA Closed:	Date	
Work Orde	er:					DISPOSITION				AGAINST DE	PARTMENT	PROCESS	
Part N NCR N	•					Rework Skid-tube Crosstube Scrap Machining Small Fab Use-as-is Thermoforming Finishing Work Order Update Large Fab Composite			Finishing		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other	
Root		_			l	ption of work order update	1	Initial	Actio		Sign &		0.01
Cause		Date	Step	Qty	(or Non-conformance	Ch	hief Eng Description			Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training													
Unapproved	Ш	<u> </u>	<u> </u>	l	L		<u>.</u> -ΔιΙ	T CATE	GORY			<u> </u>	<u> </u>
Landi	ng G	Gear		•		General							
		Gear Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube		o/s	Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short		⊣ '	on Incomplete ions Incomplete/Un nance iled	clear	Ovalized Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	ct issing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other	
	\vdash	Ripples in	•			Drill Holes		Offset] - 11 51 2300)		1
		Torque W		xtrusio	n	Drawing	Out of Calibration						

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Order ID 97529 February-21-13 3:06:17 PM				*975		Page 3					
Item ID: Revision ID: Item Name:	D3929-042 Gusset Assem	nbly		Accept	*N9000	40100)* Setup	Start Stop	*NS	11*	
Start Date: Required Date: Reference:	2/15/13	Start Qty: 2.00 Req'd Qty: 2.00	*2* *2*		Cust Item ID: Customer:				IVI	•	
Approvals:		an:		Tooling: SPC (Y/N):	Date Date	:	Run	Start Stop	*NF	?1* ?2*	
Sequence ID/ Work Center II 160 *160* QC Quality Control	D	Operation Description QC5- Inspect part compl	eteness to step on W/O	Set Up/ Run Hours 0.00	Tool ID	Tool # Plan Code	Accept Rough	ty :		Insp. Stamp DAS 9 9-89	
170 Packaging Packaging		Identify as per dwg & Sto	ock Location:	0.00	·	& <		OAS 43 	<i>[3</i> ,	11-28	
*180 *180* QC Quality Control		QC21- Final Inspection -	- Work Order Release	0.00				3/1	1/29 me	H	

13-11-28

												DQA:	Da ⁻	te:	_
NCR:	Yes	/ No				WORK ORDER NON-	COL	NFORM	ANCE / UPE	DATE					
												QA Closed:	Da	te:	
Work Ord	or.					DISPOSITION				AGAINST D	EF	PARTMENT	PROCESS		
VVOIK OIG	τι.					Rework	n l		Skid-tube	Crosstube	٦		Water Jet		Engineering
Part I	Vo.					Scrap	1		Machining	Small Fab	1	Pro	od. Eng. Coor.		Quality
						· — ·		noforming	forming Finishing Rec/		Rec/Stor	tore/Packaging		Other	
NCR No.				Work Order Update		Large Fab Composite			Supplier						
								misial.	A a t	· · · · · · · · · · · · · · · · · · ·		Sign 9			
Root		Data	Chan	04		ption of work order update or Non-conformance	1	Initial	Act	ion iption		Sign & Date	Verificatio	n	QC Inspector
Cause		Date	Step	Qty		or Non-conformance	Cn	ief Eng	Descr	ірцоп	┪	Date	vermeano	11	QC IIIspector
Doc/Data	\vdash										ļ				
Equip/Tooling Operator	-						1				1				
Material	\vdash						-								
Setup											ļ				
Other							İ								
Process		i													
Supplier			ļ												
Training			į												
Unapproved															
			(4,5°	7			AUI	T CATE	GORY						
Landi	ng (Gear	* \$ 3 * 5			General		-		_		,			1
		Bending	* 3	•		Bend	L	Grain				Ovalized		_	Pressure/Forced
		Centre N	ot Concer	ntric to	o/s	BOM/Route		Hardwa	re			Over/Under	tolerance		Temperature/Cure
		Cracks				Broken/Damaged		Inspecti	on Incomplete			Part Incorre	ct	L	Weld
		Crushed/	Crimped.		L	Burrs Instructions Incomplete/Unclear			Jnclear		Part Lost/Mi	ssing		Wrong Stock Pulled	
	L	Cuffs				Contamination	Maintenance				Part Moved				
		Heat Treat Countersink Mislabeled					eled			Positioned V	Vrong	_	-		
	Inspection Strip in Tube			Tube		Cut Too Short		Misread				Power Loss/	Surge		Other

Offset

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Torque Waves in Extrusion

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Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Picklist Print Page 1 February-21-13 3:06:16 PM Work Order ID: 97529 D3929-042 Required Date: 3/01/13 Parent Item: **Start Date: 2/15/13** Start Qty: 2.00 Parent Item Name: Required Qty: 2.00 Gusset Assembly Comments: Qty per Kit Total Component Item ID/ Replacement Mfg/ Last Unit of Qty on Qty Date Status Bin **Primary** Route Measure Hand Item Name Item ID Item Location Location Seq ID Qty Issued Issued Purch M304S11GA No 100 sf 266.5500 0.45 0.9473684 Purchased 13-11-04 304/316 0.125 Sheet Loc Qty Location Loc Code $\frac{126075 \longrightarrow 3.76}{=}$ 2 Re 13-11-26 MAT020 266.55 122521 74.55 24445 192 D3907±1 130 Manufactured No Each 92.0000 Bushing Loc Code Location Loc Qty B106874 - 1069 WA004 52 88891

15

35 40

40

89688 95215

96302

96746

WA007

											DQA:	Date	2:
NCR:	Yes	/ No				WORK ORDER NON-		NFORI\	ANCE / UPD	DATE			
											QA Closed:	Date	2:
Work Ord	or.					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
WOIK OIG	٠, .					Rework	7		Skid-tube	Crosstube		Water Jet	Engineering
Part I	۷o.					Scrap	1		Machining	Small Fab	Pro	d. Eng. Coor.	Quality
	•					Use-as-is Thermoforming		Finishing	Rec/Sto	Other			
NCR No.						Work Order Update			Large Fab	Composite		Supplier	
									Λ - +	·	Cian 0	T	1
Root		D-1-	Char			ption of work order update	ł	Initial	Act		Sign & Date	Verification	QC Inspector
Cause	_	Date	Step	Qty	(or Non-conformance	Cn	ief Eng	Descr	iption	Date	verilication	QC IIIspector
Doc/Data													
Equip/Tooling	<u> </u>												
Operator	Н												
Material	-		1										
Setup		1							!				
Other													
Process												ļ	
Supplier	\vdash												
Training													
Unapproved				1			ΔΠ	T CATE	GORY		I	1	
Landi	nø (Gear				General			-		·		
	_	Bending			Γ	Bend	Г	Grain			Ovalized		Pressure/Forced
	-	Centre N	ot Conce	ntric to	o/s	BOM/Route		Hardwa	re		Over/Unde	r tolerance	Temperature/Cure
	_	Cracks			"	Broken/Damaged		4	on Incomplete		Part Incorre	<u>-</u>	Weld
	-	Crushed/	Crimped			Burrs		1	ions Incomplete/l	Jnclear	Part Lost/M	⊢	Wrong Stock Pulled
		Cuffs				Contamination	Maintenance				Part Moved	· L	_ ~
	\vdash	Heat Trea	at			Countersink	——————————————————————————————————————			 	Positioned		
	—	Inspection Strip in Tube				Cut Too Short		Misread			Power Loss		Other

Offset

Out of Calibration

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Finish

DART AEROSPACE LTD	Work Order:	97529
Description: Support Gusset	Part Number:	D3929-1
Inspection Dwg: D3929 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.375	+0.006/-0.001	,317			V	JKM-OI
0.500	+/-0.010	.500	3		·	
0.500	+/-0.010	,500	_		V	
4.036	+/-0.010	4 036	_		~	
4.382	+/-0.010	4.382	_		V	
8.274	+/-0.010	8.274			T	
10.915	+/-0.010	10,915	_		T	
1.000	+/-0.010	1.000			V	
11.198	+/-0.010	11.198	-		7	
0.500	+/-0.010	500	-		V	
1.572	+/-0.010	1.572	1		V	
0.125	+/-0.010	.117	_		V	
	`				-	
	·					

Measured by:	Audited by:	Smb	Prototype Approval:	N/A
Date: 13 . [/ 04	Date:	13/1/09	Date:	N/A

Rev	Date	Change		Revised by	Approved
Α	09.05.27	New Issue	P/O D3929-041/-042	KJ 🚓	<i>X</i>

D3929-042 GUSSET ASSEMBLY	

QTY -041 Q1Y -042 ITEM DESCRIPTION D3929-041 D3929-042 GUSSET ASSEMBLY
GUSSET ASSEMBLY D3907-1 BUSHING SUPPORT GUSSET D3929-1

> SHOPEL Richard Co. 4804° 77 UNCOPIR 'L ACTORY SCHROTTO SECOND OF WITTOUT WITCH 13-02-25

Α	NEW ISSUE			MB	09.04.03
REV.			DESCRIPTION	BY	DATE
DESIGN		1	DART AEROSPACE LTD		
DRAWN		_	HAWKESBURY, ONTARIO, CANADA		
CHECKED		P&	DRAWING NO.		REV. A
MFG. APPR.		I AX	D3929		SHEET 1 OF 3
APPROVED		11/12	TITLE	-	SCALE
DE APPR.		4	GUSSET ASSEMBLY		NTS
DATE 09.04.03			COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND COMPROFUTION, AND IS SUPPLIED ON THE PRIVATES CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMPEDIA COMMUNICATION TOWN OTHER PERSON WITHOUT WRITTEN PERSONS PROVIDENT AND SPACE LTD.		

D3929-041 GUSSET ASSEMBLY

NOTES:
1) MATERIAL: N/A
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3929-04X" USING FINE POINT PERMANENT INK MARKER
7) WEIGHT: 0.73 lbs EACH
8) WELDING: PER DART QSI 004



